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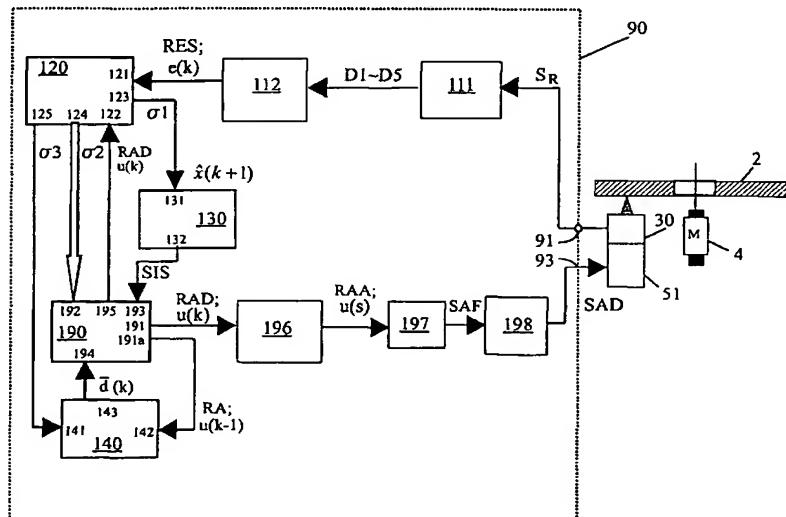
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[Continued on next page]

(54) Title: DISC DRIVE WITH IMPROVED RESISTANCE AGAINST MECHANICAL SHOCKS



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(57) **Abstract:** A disc drive apparatus (1) comprises; a) actuator means (50) for controlling the positioning of an element (34) of a scanning means; b) error signal calculating means (111, 112) for receiving a read signal (SR) and generating at least one error (RES; e(k)); c) a state estimator (120) for receiving said error and for outputting derived signals (s1, s2, s3); d) shock detector means (130) for generating a shock indication signal (SIS); e) actuator control signal generator means (190) designed to perform sliding mode control (SMC), having at least one variable control parameter, for generating an actuator control signal (RAD; u(k)) on the basis of a second one (s2) of said derived signals; f) the actuator control signal generator means setting a first value for said variable control parameter during normal operation, and setting a second value for said variable control parameter when said shock indication signal indicates the occurrence of a shock.



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B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 046 878 A (HAMPSHIRE RANDALL D ET AL) 4 April 2000 (2000-04-04) the whole document	1-8,13
A	-----	9-12
X	EP 0 798 704 A (CIRRUS LOGIC INC) 1 October 1997 (1997-10-01) abstract	1-8,13
A	-----	9-12
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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